L Number	Hits	Search Text	DB	Time stamp
1	2849	agent$1 near20 rule$1	USPAT; EPO; JPO; DERWENT	2004/07/06 11:17
2	72824	(predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1)	USPAT; EPO; JPO; DERWENT	2004/07/06 10:59
3	200	(agent$1 near20 rule$1) and ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1))	USPAT; EPO; JPO; DERWENT	2004/07/06 10:30
4	29246	(predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (global$2 or communit$3 or improv$5 or militar$4 or campaign$3)	USPAT; EPO; JPO; DERWENT	2004/07/06 11:16
5	220	(agent$1 near20 rule$1) and (((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (global$2 or communit$3 or improv$5 or militar$4 or campaign$3)))	USPAT; EPO; JPO; DERWENT	2004/07/06 11:01
6	8380	(predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (financ$5 or bank$3 or market$3)	USPAT; EPO; JPO; DERWENT	2004/07/06 11:16
7	2718	agent$1 near15 rule$1	USPAT; EPO; JPO; DERWENT	2004/07/06 11:17
8	9876	(agent$1 or bot$1) near15 rule$1	USPAT; EPO; JPO; DERWENT	2004/07/06 11:17
9	1014	((agent$1 or bot$1) near15 rule$1) and (((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (global$2 or communit$3 or improv$5 or militar$4 or campaign$3)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (financ$5 or bank$3 or market$3)))	USPAT; EPO; JPO; DERWENT	2004/07/06 11:18

10	3	(((agent$1 or bot$1) near15 rule$1) and ((((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (global$2 or communit$3 or improv$5 or militar$4 or campaign$3)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (financ$5 or bank$3 or market$3)))) and (microsimulat$5 or micro adj2 (simulat$5 or model$3))	USPAT; EPO; JPO; DERWENT	2004/07/06 11:21
11	220	(((agent$1 or bot$1) near15 rule$1) and ((((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (chang$3 or impact$3 or econom$3 or environment$2 or difference$1)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (global$2 or communit$3 or improv$5 or militar$4 or campaign$3)) or ((predict$4 or forecast$3 or fore adj cast$3 or model$3 or simulat$4) near10 (financ$5 or bank$3 or market$3)))) and 706/$.ccls.	USPAT; EPO; JPO; DERWENT	2004/07/06 11:33
12	254	((agent$1 or bot$1) near15 rule$1) near70 (predict$5 or forecast$3 or fore adj cast$3 or model$3 or simulat$4)	USPAT; EPO; JPO; DERWENT	2004/07/06 11:34
13	65	(((agent$1 or bot$1) near15 rule$1) near70 (predict$5 or forecast$3 or fore adj cast$3 or model$3 or simulat$4)) and 706/$.ccls.	USPAT; EPO; JPO; DERWENT	2004/07/06 14:02
14	189	(((agent$1 or bot$1) near15 rule$1) near70 (predict$5 or forecast$3 or fore adj cast$3 or model$3 or simulat$4)) not ((((agent$1 or bot$1) near15 rule$1) near70 (predict$5 or forecast$3 or fore adj cast$3 or model$3 or simulat$4)) and 706/$.ccls.)	USPAT; EPO; JPO; DERWENT	2004/07/06 14:03

```
 exs
Executing TD599
HILIGHT set on as '%'
>>>File 20 processing for CAST? stopped at CASTLERIG
Processing
Processing
Processed  10 of  15 files ...
Completed processing all files
          2754351  AGENT?
         11930206  ECONOM?
          2425228  MILITAR?
          3367759  PREDICT?
          3194653  FORECAST?
            95263  FORE
          1523431  CAST?
             1071  FORE(W)CAST?
      S1  684604   (AGENT? OR ECONOM? OR MILITAR?)(15N)(PREDICT? OR
                   FORECAST? OR FORE(W)CAST?)
? e au=pryor r

Ref    Items  Index-term
E1        14 *AU=PRYOR R
E2        10  AU=PRYOR R A
E3         1  AU=PRYOR R E
E4         1  AU=PRYOR R G L
E5         2  AU=PRYOR R J
E6         1  AU=PRYOR R L
E7         3  AU=PRYOR R N
E8        19  AU=PRYOR R W
E9         1  AU=PRYOR RAY
E10        2  AU=PRYOR ROBERT J
E11        1  AU=PRYOR ROGER W
E12        6  AU=PRYOR S

         Enter P or PAGE for more
? s e1,e5
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
              14  AU=PRYOR R
               2  AU=PRYOR R J
      S2      16  E1,E5
? e au=pryor, r

Ref    Items  Index-term
E1         0 *AU=PRYOR, R
E2         7  AU=PRYOR, R.
E3        23  AU=PRYOR, R. A.
E4         1  AU=PRYOR, R. D.
E5        23  AU=PRYOR, R. J.
E6         4  AU=PRYOR, R. L.
E7         9  AU=PRYOR, R. W.
E8         1  AU=PRYOR, RICHARD
E9         1  AU=PRYOR, ROB
E10        2  AU=PRYOR, ROBERT
E11        1  AU=PRYOR, ROBERT G L
E12        2  AU=PRYOR, ROBERT G. L.

         Enter P or PAGE for more
? s e2,e5,e8
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
               7  AU=PRYOR, R.
              23  AU=PRYOR, R. J.
               1  AU=PRYOR, RICHARD
```

```
      S3        31  E2,E5,E8
? s s1 and (s2 or s3)
          684604  S1
              16  S2
              31  S3
      S4         1  S1 AND (S2 OR S3)
? t s4/6/1
```

4/6/1   (Item 1 from file: 6)
1955610 NTIS Accession Number: DE96006817
  Development of Aspen: A microanalytic simulation model of the US economy
  Feb 96
? t s4/9/1

4/9/1   (Item 1 from file: 6)
DIALOG(R)File   6:NTIS

1955610 NTIS Accession Number: DE96006817
  Development of Aspen: A microanalytic simulation model of the US economy
  %Pryor, R. J. %; Basu, N. ; Quint, T.
  Sandia National Labs., Albuquerque, NM.
  Corp. Source Codes: 068123000; 9511100
  Sponsor: Department of Energy, Washington, DC.
  Report No.: SAND-96-0434
  Feb 96   12p
  Languages: English
  Journal Announcement: GRAI9617; ERA9629
  Sponsored by Department of Energy, Washington, DC.
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  NTIS Prices: PC A03/MF A01
  Country of Publication: United States
  Contract No.: AC04-94AL85000
  This report describes the development of an agent-based microanalytic
simulation model of the US economy. The microsimulation model capitalizes
on recent technological advances in evolutionary learning and parallel
computing. Results are reported for a test problem that was run using the
model. The test results demonstrate the model's ability to %predict%
 business-like cycles in an %economy% where prices and inventories are
allowed to vary. Since most %economic% %forecasting% models have difficulty
%predicting% any kind of cyclic behavior. These results show the potential
of microanalytic simulation models to improve economic policy analysis and
to provide new insights into underlying economic principles. Work already
has begun on a more detailed model.
  Descriptors: %Economy%; Computerized Simulation; %Forecasting%; Industry;
Investment; Mathematical Models; Parallel Processing; Sales
  Identifiers: EDB/290201; NTISDE
  Section Headings: 97G (Energy--Policies, Regulations, and Studies)

03975276   EDB-96-059036
Title: Development of %Aspen%: A %microanalytic% %simulation% %model% of
    the US %economy%
Author(s)/Editor(s): Pryor, R.J.; Basu, N.; Quint, T.
Corporate Source: Sandia National Labs., Albuquerque, NM (United States)
(Code: 9511100)
Sponsoring Organization: DOE; USDOE, Washington, DC (United States)
Publication Date: Feb 1996
(12 p)
Report Number(s): SAND-96-0434
Order Number: DE96006817
Contract Number (DOE): AC04-94AL85000
Document Type: Report
Language: English
Journal Announcement: EDB9608
Availability: OSTI; NTIS; GPO Dep.
Distribution: (Report):A (MF):4 MN-905
Subfile: ERA (Energy Research Abstracts); ETD (Energy Technology Data
    Exchange); NTS (NTIS).   TIC (Technical Information Center)
US DOE Project/NonDOE Project: P
Country of Origin: United States
Country of Publication: United States

Abstract: This report describes the development of an %agent%-based
    microanalytic simulation model of the US %economy%. The microsimulation
    model capitalizes on recent technological advances in evolutionary
    learning and parallel computing. Results are reported for a test
    problem that was run using the model. The test results demonstrate the
    model's ability to %predict% business-like cycles in an %economy% where
    prices and inventories are allowed to vary. Since most %economic%
    forecasting models have difficulty %predicting% any kind of cyclic
    behavior. These results show the potential of microanalytic simulation
    models to improve %economic% policy analysis and to provide new
    insights into underlying %economic% principles. Work already has begun
    on a more detailed model.
Major Descriptors: %ECONOMY% -- MATHEMATICAL MODELS
Descriptors: COMPUTERIZED SIMULATION; FORECASTING; INDUSTRY; INVESTMENT;
    PARALLEL PROCESSING; SALES

ds

Set	Items	Description
S1	20953	(AGENT OR AGENTS OR BOT OR BOTS)(10N)(RULE OR RULES) OR MO-DUL?(10N)(DECISION(W)RULE?)
S2	169070	(PREDICT? OR FORECAST? OR FORE(W)CAST? OR MODEL? OR SIMULA-T?)(10N)(CHANG? OR IMPACT? OR INFLUEN? OR DIFFERENCE?)(10N)(E-CONOM? OR ENVIRONMENT? OR GLOBAL? OR PLANT OR MILITAR? OR CAM-PAIGN?)
S3	458	S1 AND S2
S4	342	RD (unique items)
S5	121	S4 NOT PY>1996
S6	225	(AGENT OR AGENTS OR BOT OR BOTS OR MODUL?)(7N)(DECISION(W)-RULE?)
S7	8	S5 AND S6
S8	82	S6 NOT PY>1996
S9	61	RD (unique items)
S10	20	S9 AND (PREDICT? OR FORECAST? OR FORE(W)CAST?)
S11	12	S10 NOT S7

? logoff

at least title

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L1         11 SEA (PREDICT? OR FORECAST? OR FORE CAST? OR MODEL? OR SIMU
LAT
           ?)(5A)(CHANGE# OR CHANGING OR ACTIVIT?)(5A)ECONOM?
L2       1250 SEA (PREDICT? OR FORECAST? OR FORE CAST? OR MODEL? OR SIMU
LAT
           ?)(10A)ECONOM?
L3         30 SEA L2 AND 705/CLAS
L4         12 SEA L3 AND RULE#
L5        901 SEA DECISIONMAKER# OR DECISION(W)(MAKER# OR UNIT#)
L6   DEL   12 S L3 AND L4
L6          1 SEA L4 AND L5
L7          2 SEA L3 AND L5
L8          5 SEA L2 AND L5
L9          3 SEA AGENT##(P)L5
L10        38 SEA L5(P)RULE#
L11         2 SEA L10 AND 705/CLAS
L12        36 SEA L10 NOT L11
L13        14 SEA L12 AND 364/CLAS
L14       672 SEA (HOUSEHOLD## OR HOUSE HOLD# OR INDIVIDUAL##) AND GOVER
NME
           NT## AND (INDUSTR### OR FIRM##) AND BANK###
L15         6 SEA L5 AND L14
L16       522 SEA MICROECONOMIC? OR MICROSIMULAT? OR MICROANALYTIC?
L17         0 SEA L5 AND L16
L18         2 SEA L14 AND L16
L19         1 SEA L2 AND L16
L20      4505 SEA MESSAGE#(5A)ROUT?
L21        79 SEA L20(P)AGENT#
L22         2 SEA L5 AND L21
```

Search Options:
    Search for both singular and plurals: YES
    Search for spelling variants   : YES
    Display intermediate result sets   : NO

Num	Search	Hits
#1	(predict? or model? or forecast? or simulat?) w/10 econom?	15703
#2	microeconom?	502
#3	#1 and #2	235
#4	agent?	9832
#5	#3 and #4	27
#6	(predict? or model? or forecast? or simulat?) w/5 (chang? or activit?) w/5 econom?	618
#7	#2 and #6	6
#8	artificial intelligence or neural network? or neurocomputer? or expert system? or heuristic?	4300
#9	#6 and #8	2

Search Options:
    Search for both singular and plurals: YES
    Search for spelling variants   : YES
    Display intermediate result sets : NO

Num	Search	Hits
#1	(predict? or forecast? or fore cast? or model? or simulat?) w/5 (chang? or activit?) w/5 econom?	18
#2	microeconom?	31
#3	agent?	1853
#4	#2 and #3	0
#5	decisionmaker? or decision maker?	93
#6	#2 and #5	0
#7	#3 and #5	1
#8	#1 and #2	0

Search Options:
    Search for both singular and plurals: YES
    Search for spelling variants   : YES
    Display intermediate result sets   : NO

Num	Search	Hits
#1	(predict? or forecast? or fore cast? or model? or simulat?) w/10 econom?	883
#2	decisionmaker? or decision w/1 (maker? or unit?)	64
#3	#1 and #2	2
#4	agent	1366
#5	#2 and #4	4
#6	microeconom? or microsimulat? or microanaly?	3
#7	#1 and #4	11
#8	(predict? or forecast? or forecast? or model? or simulat?) w/5 (chang? or activit?) w/5 econom?	27
#9	#2 and #8	0
#10	#4 and #8	1

Set	Items	Description
S1	29216	(PREDICT? OR FORECAST? OR FORE(W)(CAST? OR TELL?) OR MODEL? OR SIMULAT?)(7N)(CHANG? OR ACTIVIT?)(7N)ECONOM?
S2	22979	S1 AND PY<1997
S3	79655	DECISION(W)(MAKER OR MAKERS OR UNIT OR UNITS) OR DECISIONM-AKER??
S4	580	S2 AND S3
S5	1286	S3(S)AGENT??
S6	27	S2 AND S5
S7	18	RD (unique items)
S8	14711	MICROECONOM? OR MICROSIMULAT? OR MICROANALYTIC?
S9	6	S7 AND S8
S10	100	AGENT?(20N)(DECISIONRULE?? OR DECISION(W)RULE?)
S11	7	S4 AND S10
S12	4	RD (unique items)
S13	0	AGENT?(20A)MESSAG?
S14	12065	AGENT?(20N)MESSAG?
S15	0	S7 AND S14
S16	0	S4 AND S15
S17	0	S4 AND S14
S18	7	S2 AND S14
S19	5	RD (unique items)
S20	10923	ROUT?(5N)MESSAG?
S21	0	S4 AND S20
S22	68	S4 AND S8
S23	51	S22 AND RULE??
S24	34	RD (unique items)
S25	5	S24 AND MESSAG?
S26	28	S24 NOT S9
S27	27	S26 NOT S12
S28	27	S27 NOT S19
S29	4	S28 AND MESSAG?
S30	23	S28 NOT S29
S31	9	S30 AND AGENT?
S32	14	S30 NOT S31
S33	164	S4 AND AGENT??
S34	115	RD (unique items)
S35	12	S34 AND LUCAS
S36	286	E1,E6-E8
S37	203	E4,E8-E9
S38	341	S36 OR S37
S39	114	E1,E5-E11
S40	455	S38 OR S39
S41	3	AU="LUCAS ROBERT"
S42	458	S40 OR S41
S43	0	S4 AND S42
S44	2	S2 AND S42
S45	2	S8 AND S42
S46	0	S3 AND S42
S47	6	S42 AND AGENT?
S48	6	RD (unique items)
S49	141	S42 AND PY<1982
S50	93	S42 AND PY<1980
S51	48	S49 NOT S50
S52	9	S51 AND ECONOM?
S53	2	S52 AND MODEL?